DOCUMENT RESUME

ED 173 976 EC 114 909

AUTHOR	Evenson, Jill; And Others
TITLE	Extending Experience-Based Career Education to Handicapped Students: An Overview of the Mainstreaming Approach.
INSTITUTION	Far West Lab. for Educational Research and Development, San Francisco, Calif.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Jan 79
NOTE	26p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Career Education; *Experiential Learning; Federal Legislation; *Handicapped Children; *Individualized Programs; Secondary Education; Student Needs
IDENTIFIERS	*Experience Based Career Education

ABSTRACT

The paper discusses the appropriateness for handicapped students of Experience-Based Career Education (EBCE), a flexible high school program of highly individualized learning that utilizes direct experience in work and community settings to promote growth in basic academic skills, self-reliance, and career awareness. The need for expanded career education and education in life skills for handicapped individuals is considered in terms of legal requirements (particularly those of P.L. 94-142, the Education for All Handicapped Children Act; P.L. 94-482, the Vocational Education Act Amendments of 1976; and Section 504 of the Rehabilitation Act of 1973) and the learning requirements of handicapped students. EBCE's core features and the outcomes it offers are looked at, and some of the planning needs and adaptive steps to consider in incorporating handicapped students into ongoing EBCE programs are considered. It is pointed out that since EBCE is already highly individualized, handicapped students can be incorporated into the program through further extending its capacity to meet individual student needs, without changing the overall structure and purposes of the program. (SEH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED173976

EXTENDING EXPERIENCE-BASED CAREER EDUCATION to HANDICAPPED STUDENTS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

An Overview of the Mainstreaming Approach

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Far West Laboratory for Educational Research and Development
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

EC114909

FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education, the Department of Health, Education, and Welfare, or the Far West Laboratory for Educational Research and Development, and no official endorsement by these agencies should be inferred.

EXTENDING EXPERIENCE-BASED CAREER EDUCATION TO HANDICAPPED STUDENTS

AN OVERVIEW OF THE MAINSTREAMING APPROACH

by

Jill Evenson

Robert Spotts

Paul Perencevic

January, 1979

FOREWORD

This paper discusses the appropriateness of Experience-Based Career Education (EBCE), a recent major school improvement effort, in meeting many of the significant educational needs of handicapped students--youth whose special needs were not considered in depth during the design of the innovation. EBCE had its beginning in 1971 under the auspices of the U. S. Office of Education and its Commissioner of Education, Sidney Marland. At that time the academic and life-preparation needs of youth in general were translated into a statement of educational goals and objectives that have served as the framework for the four EBCE curriculum models developed by the Appalachia Educational Laboratory, the Far West Laboratory for Educational Research and Development, the Northwest Regional Educational Laboratory, and the Research for Better Schools, Inc. Beginning with the original studies of feasibility funded by USOE and followed by continuing funding from the National Institute of Education for curriculum design and testing, model demonstration and evaluation, program replication, and dissemination--EBCE has become quite possibly the largest curriculum development of the 1970s. As of this date, more than 200 EBCE programs are operating, most of them at the secondary schools level.

EBCE developers have become aware of the "fit" of their learning strategy with the need for many handicapped students for individualized learning programs offering contact with the community, providing opportunities for exploring various career options, and stressing the development of survival (or "coping") skills necessary for independent living. In fact, several EBCE programs for handicapped students have been initiated and are operating with remarkable results; examples are the EBCE for mildly mentally disabled under the auspices of Iowa Central Community College, the EBCE program for learning disabled and mildly mentally retarded in the Arlington (Virginia) Public Schools, and the Nevada State Department of Education's set of four programs for learning disabled statewide.

This paper, however, might be considered as an outgrowth of Public Law 94-142, for it presents evidence of the need for, and feasibility of, EBCE programs serving handicapped and non-handicapped students together (i.e., mainstreaming). Far West Laboratory is convinced that the already highly individualized, self-paced nature of an EBCE program can accommodate handicapped youth through extending the capacity of the program but without changing the program structure, and without extensive materials adaptation. This paper summarizes the legal mandate for the "mainstreaming" approach and provides a basic discussion of its feasibility. A follow-up paper will present several implementation scenarios developed by FWL in concert with school districts that are intent upon acting in response to the legislation.

The paper was, in large, prepared by Jill Evenson of the Far West staff. Overall direction was provided by Robert Spotts who has responsibility within the Laboratory's EBCE Knowledge-Building Project for research in applications of Experience-Based Career Education. Paul Perencevic, Lead Teacher at Vista Del Mar School for Learning Disabled (Los Angeles County Schools) and President of the Career and Vocational Educators subgroup of the California Federation, Council on Exceptional Children, contributed his extensive knowledge of the educational needs of handicapped children and of the legislation guiding the provision of career education to them.

In addition, much of the readibility of the paper is due to the efforts of Julia Cheever, who created readable drafts from research notes. Finally, the paper benefitted from the critical reviews of Jim Johnson, Michael Webb, and Suzanne Hering of the Far West Laboratory staff.

George P. Rusteika
Chairperson, Department of
Adult Productivity and Satisfaction
Far West Laboratory for Educational
Research and Development

> Career education seeks to make work possible, meaningful, and satisfying for all individuals. To do so for handicapped persons demands, first of all, that we regard their right to choose from among the widest possible set of opportunities equally as important as for any other individual.
>
> Kenneth Hoyt (1976)

The recognition of the rights of handicapped individuals has often been called the civil rights frontier of American society in the 1970's. Education, including career and vocational as well as academic education, stands among the foremost of these rights. The Education of All Handicapped Children Act of 1975 and other federal laws now guarantee handicapped students the rights to a full public education, and many federal, state, and local agencies have designated this area as a priority for expanded efforts and programs.

Among educators, this movement has brought with it a growing awareness that both the options and the needs of handicapped people are broader than has previously been acknowledged. On the one hand, teachers, counselors and administrators are becoming aware that handicapped people have a wider choice of career options and the potential for a greater degree of self-sufficiency that was previously assumed. On the other hand, educators are beginning to place greater emphasis on a broad spectrum of developmental needs that exceptional students have in common with non-handicapped students, such as the needs to learn how to make decisions, to progress in interpersonal and social skills, to acquire practical living skills that contribute to self-sufficiency, and, in the field of career development, the need to be aware of a variety of options. Education serving such needs is particularly important for many handicapped students who have been hindered in learning these skills either by

their disabilities or by overprotectiveness on the part of their families and the agencies serving them. The result is often an insulation of handicapped students from the school and community life surrounding them.

To date, traditional and special education approaches in our nation's classrooms have resulted in programs for handicapped students that have enabled many students to profit academically in the classroom setting and to learn the personal and social skills necessary to maintain themselves in a classroom environment. However, they may still be unequipped to cope with the working world outside of the school setting. There is a continuing need for a learning environment which combines career and special education to provide handicapped students with opportunities to learn the life, job, and social skills necessary for survival in the working world, and to apply the skills in a real situation. There also is increasing pressure from legislation and from the concerned community of parents, students, and educators to offer handicapped students the option of a mainstreamed environment in which to acquire career-related skills.

One alternative with clear potential for helping to fill this need is Experience-Based Career Education (EBCE), a flexible high school program of highly individualized learning that utilizes direct experience in work and community settings to promote growth in basic academic skills, self-reliance, and career awareness. The purpose of this paper is to outline how and why EBCE seems particularly suited to the learning requirements of handicapped students, by first reviewing the need for such programs, then by briefly looking at EBCE's core features and the outcomes it offers, and finally by discussing some of the planning needs and adaptive steps to consider in incorporating handicapped students into ongoing EBCE programs.

The Need for Expanded Career Education and Education in Life Skills for Handicapped Individuals

The Legal Mandate. Three recently passed federal laws now require public schools to provide handicapped individuals with a full education, including career and vocational education if appropriate. The first of these is Public Law 94-142, the Education for All Handicapped Children Act of 1975, which mandates a "free appropriate public education" in the "least restrictive setting" to all persons between the ages of 3 and 21. It authorizes grants of federal funds, channeled to school districts through state education agencies, to cover the excess costs of educating handicapped students. Vocational education is one of services it specifically requires schools to provide. Section 121 a.14 of the law states: "...'special education' means specially designed instruction, at no cost to the parent, to meet the unique needs of a handicapped child...." "The term also includes vocational education if it consists of specially designed instruction...to meet the unique needs of a handicapped child." Support for career education, and EBCE particularly, is found in Section 121 a.14 (b) (3): "'Vocational Education' means organized education programs which are directly related to the preparation for a career requiring other than a baccalaureate or advanced degree."

The mechanism that P.L. 94-142 establishes for the delivery of services is the Individualized Education Program (IEP), a plan of education and related services specially designed for each child. An IEP must be recorded in writing and reviewed at least annually. The team that prepares an IEP for a student consists of a school district representative (such as a principal) who is qualified to provide or supervise the provision of special education; the student's teacher or teachers; one or both parents or a parent surrogate; the student, when appropriate; and other individuals, at the discretion of the parent or agency.

P.L. 94-142 also states that appropriate vocational services must be included in the student's Individualized Education Program. Since parents and students are included at the IEP planning conferences, they may share in the career and vocational planning.

A second law, the Vocational Education Act Amendments of 1976 (P.L. 94-482) extends help to handicapped and disabled individuals of all ages who need vocational education services. The law requires that at least 10 percent of federal vocational funds received by states must be spent on vocational education for handicapped. Services for handicapped children include: vocational instruction, curriculum development and modification to enable students to take part in programs, vocational evaluation, interpreters for the deaf, readers for the blind, note-takers, tutors, and vocational counseling. Further, P.L. 94-482 requires that vocational education planning be coordinated within the student's IEP.

Supporting these two is a third law, Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against handicapped people on the part of any agency (including a school district) that receives federal funds. Schools that fail to comply with this law risk losing all federal funding. The law secures the civil rights of all handicapped individuals by prohibiting discrimination on the basis of handicap in any program receiving federal financial assistance. It supports the P.L. 94-142 mandate that every handicapped student has a right to a free and appropriate education. In fact, Section 504 reaffirms the right of the handicapped to receive appropriate career and vocational training opportunities.

Requirements for the education of the handicapped are also incorporated into many state and local laws and policy documents. For example, the California Education Code, Section 7504, states that every individual leaving school

must have had the opportunity to be prepared to enter the world of work. Ohio State Law 455, passed to support the provisions in P.L. 94-142, requires schools in the state of Ohio provide an appropriate education for handicapped children.

Many groups and individuals concerned with special education view career education and instruction in life skills as vital parts of the "appropriate education" required by P.L. 94-142, both because they are appropriate in their own right and because they are a necessary part of the vocational education service mandated by the law. In its 1978 Delegate Assembly, the Council for Exceptional Children adopted the position that appropriate education for exceptional children must include "the opportunity for every student to attain his/her highest level of career potential through career education experiences." Defining career education as "the totality of experience through which one learns to live a meaningful, satisfying work life," the Council stated that this area includes "the academic, daily living, personal-social and occupational knowledges, and specific vocational skills" that exceptional children need in order to attain "their highest level of economic, personal, and social fulfillment." (Council for Exceptional Children, 1978).

The Need. Handicapped students include those with speech impairment, mental retardation, learning disabilities, emotional disturbances, orthopedic impairment, deafness, limited hearing, blindness, limited vision, and other health impairments. In 1975, the U.S. Bureau of Education for the Handicapped estimated that 12 percent of elementary and secondary students had one or more of these conditions. The most frequently occurring conditions were speech impairment (3.5 percent of the total population), mental retardation (2.3 percent), learning disabilities (3.0 percent), and emotional disturbance (2.0 percent). (Halloran, 1978). Many students with these and other disabilities

or impairments have been insulated educationally and socially from the workaday world. They have had little or no opportunity to learn how to function in that world, to find out firsthand what kind of options it offers them and to develop the skills needed to pursue such options. For example, it was reported in 1975 that handicapped persons represented only 1.7% of the total students enrolled in vocational education classes in the Nation. (Lee, 1975). Also it has been reported that two-thirds of the vocational education provided to handicapped students is non-skills training not intended to prepare students for the open market and that most handicapped students receiving vocational education are placed in special classes. (Olympus Research Corporation, 1974). A study by Brolin (1973) indicated that the majority of the teacher training schools surveyed did not offer Career Education as part of the Special Education curriculum.

In a study of a California community, a sample of more than 50 parents, educators, other professionals, and community members used a Delphi technique to identify the priorities they perceived for further training for handicapped young adults. Of 32 areas, the two highest priorities were for (1) expanded vocational and on-the-job training for employable skills and (2) more training in the area of daily living skills, such as consumer skills, driving, and use of the telephone. (Coy, 1977).

An effective career education program would serve several particular needs in the education of handicapped students. Perhaps the most fundamental is the need to eliminate stereotyped beliefs about limitations in the capabilities of handicapped persons. Davis and Weintraub (1978) point out that handicapped individuals are capable of performing successfully in a wide range of careers and that career education can play a major role in helping to eliminate stereotyping in career choices. Among the causes of unnecessarily

delimited career choices are overprotectiveness on the part of teachers and families, insufficient coordination between special educators and career and vocational educators, and lack of knowledge about careers and inaccurate self-perceptions on the part of handicapped persons. A second and related need is to provide handicapped students very early in their school years with opportunities to become aware of the broad range of career options open to them. The Parents' Campaign for Handicapped Children and Youth stresses the fact that while career awareness is important for all children, it is particularly important for those who are handicapped because they may have been deprived of "experiences others get as a matter of course--from tinkering with cars to lawnmowing or caring for the neighbor's children." (Parents' Campaign, 1978).

In a guide written for vocational educators who will work with handicapped students in regular (mainstreamed) classrooms, Robert Weisgerber states that vocational education should contain career awareness training and pre-vocational orientation. He specifies that pre-vocational orientation includes personal and social skills that affect employability; daily living skills; process skills related to seeking employment, such as the ability to fill out forms and use public transportation; and special skills that make use of mathematics, reading, perceptual, or manipulative abilities. (Weisgerber, 1977). As Weisgerber has implied, a third area of importance to handicapped students is that of developing coping skills, the ability to deal with problems encountered in daily living. Philip Hatlen, a professor of special education at San Francisco State University, has argued that handicapped individuals strongly need education that will help them overcome the "learned helplessness" historically fostered by overprotectiveness on the part of agencies that have cared for the handicapped. In his view, if handicapped students lack opportunities

to make decisions and to do for themselves when young, they will lack motivation and self-sufficiency as adults. Thus, important areas in the career education of handicapped students include mobility orientation, living skills, social skills, communication skills (such as use of the telephone), recreation, and vocational readiness and placement. (Hatlen, 1978).

A final need--one that will serve the others we have mentioned--is for active career-exploration experience, direct exposure to a variety of employment settings and to the people who work in them. Hull (1977) has stated that the provision of hands-on vocational exploratory activities helps vocational educators identify the students who can participate successfully in regular vocational programs and also tends to reduce handicapped students' anxiety about being placed in such programs. Godla (1978) has noted that sheltered workshops, simulation, and regular vocational programs that do not train handicapped students in realistic job environments have often been found inadequate.

The Suitability of EBCE in Meeting the Educational Needs of Handicapped Students

Program Features. Experience-Based Career Education (EBCE), a learning program linking the school and community was developed during 1971-74 and has been disseminated on a national basis since 1975, is in many ways ideally suited to provide a needed high school option for handicapped students. The program uses the entire community as a school. Learning projects based at employer sites and other community sites enable students to combine career exploration with the study of basic academic skills (such as reading and computing), and life skills (such as decision-making and interpersonal comunication). It combines the functional learning of basic skills and academic subject matter with first hand exposure to a variety of occupational settings. The success of the EBCE program has been extensively documented in the form of evaluation reports and operational handbooks, providing a strong foundation

for the expansion of the program to handicapped individuals. It has proved quite adaptable to a variety of district physical facilities, school schedules, and student audiences.

In an EBCE program each student is assigned at the school site a "learning coordinator" who facilitates program planning and monitors activities. Each student's program is individually designed, primarily by the student, to meet his/her needs and interests. The basic mechanism used to organize learning is the individual student project. Students earn academic credit for projects that blend community experiences with academic learning. Credit can also be earned through small group or individual instruction for subjects that can not easily be intergrated with community experience (such as foreign language instruction) or where intensive remedial work may be needed (such as reinforcement of basic skills). The program emphasizes decision-making and individual responsibility on the part of students with supportive planning and monitoring by their learning coordinator.

Another integral staff role in the EBCE program is that of the "resource analyst" who recruits, orients, and maintains a pool of community resource persons and organizations. The resource analyst and community resource together develop a brief description of the activities occurring at that worksite, together with possible linkages to academic areas. From this pool of learning sites, students are able to select resource persons or organizations with whom they can explore careers while they obtain information for their projects.

Examination of the learning strategies of EBCE (see the bibliography) suggests its appropriateness as a program for serving handicapped and non-handicapped students together. Program elements that seem particularly pertinent are the emphasis on individualized treatment of every student, a

one-to-one relationship between students and adults, coordination and close working relationships among staff members, flexibility in scheduling, and a unique structuring of community learning experiences. Among the student program priorities are self-assessment and career awareness, self responsibility and independent learning, decision-making and community exploration.

Outcomes. These program priorities translate into intended learning outcomes. Through individualized projects planned primarily by students themselves, direct and practical exposure to a variety of everyday work settings, one-to-one relationships with adults in the field, and facilitative interaction with EBCE staff at the school, students are expected to develop the "survival skills" that will help them become:

- planful: not only about their long-range futures, but about how they intend to accomplish more immediate goals and tasks;
- self-reliant: able to set their own goals; plan activities; manage their time and other resources; work independently; recognize when they need help and how to seek it; evaluate their own behavior and learn from it; and accept the consequences of their own decisions and actions;
- capable of interacting with adults as equals: know what is expected of them as adults; be able to communicate on an adult level, to make and keep realistic commitments, and to have reasonable expectations of others;
- capable of making realistic and satisfying career choices: more informed about career options and requirements and more aware of their own values, needs, goals, strengths, and limitations;
- independent learners: able to identify what is worth learning; to identify and use effective sources and methods of acquiring information; and to analyze, evaluate, and incorporate new information into their own knowledge and experience.

Development of these survival skills depends upon students' growth in several areas. Original learning goals for students were established by the U.S. Office

of Education and the National Institute of Education in the early development of EBCE. Goals for an EBCE program serving both handicapped and non-handicapped students may be stated as follows:

1. Students will progress in career awareness. Acquiring a broad understanding of the world of work--how people perform tasks, deal with one another, solve problems, and derive satisfaction in their daily lives--and understanding the particular nature and requirements of specific careers.

2. Students will progress in self-development. Learning about one's own interests, abilities, values, and goals; and using this knowledge to weigh options and make informed decisions about post high school plans.

3. Students will progress in skills needed for independent living. Learning essentials of self-care; to make appointments and manage their time; to use public transportation; and to communicate effectively by telephone.

4. Students will progress in interpersonal skills. Learning to relate to others on an adult level; to recognize the needs and expectations of others; to handle interpersonal conflicts; and to contribute productively to group endeavors.

5. Students will progress in critical thinking and decision-making skills. Learning to analyze situations; to recognize problems; to identify and use appropriate sources of information; and to develop and evaluate alternative solutions. Learning to recognize decisions that need to be made; to identify options and probable outcomes; to examine personal values and goals affecting decisions; to make informed choices; and to accept responsibility for decisions made.

6. Students will progress in basic skills. Developing reading, oral communication, and computational skills essential for acquiring and communicating information in daily life.

The goals briefly summarized here should be considered realistic and attainable for handicapped as well as for non-handicapped students, providing that adaptations are made in program procedures as the need requires. For more concrete and detailed ideas of what students in EBCE programs can learn and how, see the bibliography.

Extending EBCE Programs to Handicapped Students

This presentation has one basic assumption: Since EBCE is already highly individualized, handicapped students can be incorporated into the program through further extending its capacity to meet individual student needs, without changing the overall structure and purposes of the program. The emphasis is not on developing and using a prescribed curriculum for exceptional students but on flexible use of already existing EBCE mechanisms for resource development, assessing needs, planning learning projects, and monitoring and evaluating student progress. The process is not one of redesigning EBCE for the handicapped, but rather of making adaptations as required to meet the needs of individual students. Adaptation is seen, therefore, as an on-going and dynamic process.

Organizational tasks. Seeking the support and guidance of special education personnel at the building and district level is an essential step. Their assistance will be required in orienting EBCE staff, in program planning and in providing specific information about students in the program. Also, it is necessary to eliminate any remaining separation between special and career education--to make sure that handicapped students and their special education teachers and counselors know enough about the EBCE program to be aware that it is a possible choice as part of a high school program. Since the Individualized Education Program (IEP) team is the body that makes decisions about a handicapped student's program, providing information to members of these teams is essential.

It is also important to secure a staff structure for the EBCE program that will bring continuing special education expertise to the program. The Far West Laboratory's experience in the areas of staff development and program

dissemination suggests that the most valuable structure would be one that enables the regular EBCE staff to become as self-sufficient as possible in adapting the program for handicapped students (drawing on outside resources when necessary) and even in training others to do so. Two possible staff structures appear to support this goal. The first is to designate one or more teachers and counselors in special education to act resources for the regular EBCE learning coordinators (staff members). These specialists would work primarily with learning coordinators and have relatively little contact with the students, thus encouraging the learning coordinators to assume primary responsibility for the students' program. The second possible structure is to add a learning coordinator with special education expertise to the EBCE staff. The staff member would work with handicapped students and also train the other learning coordinators, enabling them gradually to become the learning coordinators for the handicapped students.

The effectiveness of an EBCE program for handicapped students will depend greatly on the involvement of parents, on thoroughly informing them about EBCE and helping them take an active role in determining the individualized learning plan for their child. Parent participation is even more important in a program for handicapped students than in one for non-handicapped students for several reasons. First, parents are likely to have a realistic knowledge of their child's abilities and can therefore contribute significantly to the design of their child's program. Second, some parents wish to protect their handicapped child, and fear of letting the child be independent can work against the success of a program like EBCE. Such parents will be more likely to support the program if they understand clearly what it is trying to do and can participate in early planning sessions. Finally, parental support and approval provides needed positive reinforcement for the students in the program.

Parent participation in the development of an Individualized Education Program provides a natural structure for an active parent role. Other structures for informing parents and soliciting their support are: holding group orientation meetings before the program begins, holding one-to-one meetings with parents or parents and students, and forming an ongoing parent group that meets for discussions on program support activities.

It will be necessary to do some reorientation and reorganization of the community resources in order to effectively accommodate handicapped students. Some resources may require special orientation and extra monitoring initially in order to work effectively with a specific student. New resources may be developed to fit the interests and needs of new students, and it would be highly desirable for all EBCE students to have exposure to role models--exceptional individuals who are now working successfully at careers in the community. It is hoped that one outcome of the program will be an increased awareness of the needs of handicapped young people on the part of those who have participated as resource persons in EBCE.

It will be necessary to do some adaptation in the forms and written materials that are used in the program. This activity will tend to be ongoing and grow out of the special needs of students. Some resource guides may need to be revised or augmented to make them more applicable to the needs of handicapped students. Some materials may need to be rewritten in a simplified form for students with reading disabilities. Forms may need to be simplified if experience shows that they do not work with certain students. Also, some materials may need to be adapted to cassette or other non-written format.

Another organizational task will be to locate and provide any special materials and services that may be required by the exceptional students

entering the program. A frequent need in a community-based program is for transportation services. Other needed services might vary from program aides to the use of special desks or typewriters. Where physically handicapped students are placed in community it must be determined that there is barrier-free access to the site.

Understanding special student needs. The needs and abilities of individual exceptional students vary widely. EBCE staff may find that some handicapped students enter the program ready to participate fully and may show inner strengths and maturity beyond that of the average entering student. On the other hand, EBCE staff should be prepared for the fact that some handicapped students will need more attention and may require more time to reach goals within the program. The EBCE staff, already used to working with students on an individual basis, are well suited to provide the extra consideration required by this new group of students.

Certain characteristic behaviors may be observed within the group of handicapped students. They may lack certain experiences in practical life skills and in self-responsibility that other students are assumed to have. For example, they may be reticent about contacting persons by telephone, they may be inexperienced in using public transportation, they may not have had the opportunity to make decisions or choose among options that is stressed in EBCE. They may also not have been allowed to experiment, to venture beyond what seems safe and familiar, and to accept failure as well as success in self-chosen activities. An associated factor may be a lack of self-confidence in social situations, in talking and working with other students and adults.

A few examples will suggest the kinds of adaptations that various disabilities might require. A visually handicapped student might need to make use of various kinds of special equipment that may already be available in the

school district, such as a magnifier or a controlled reader. A blind student would need to have access to text materials through cassette tapes or braille. Those with behavior disorders might require more one-to-one attention, such as being accompanied by a staff member for the first few days at a new employer site. Such students might also need more follow-up, such as the opportunity to review each day for themselves in writing or on a cassette tape. A student with a speech impairment might require a learning situation that placed greater emphasis on non-oral communication. A deaf student with no other disabilities might need to be accompanied initially by a person who knows sign language. Some students might be participating in special therapy or skill-development programs for part of each day and would therefore be able to participate in an EBCE program only on a part-time basis.

For many students, such as those with mild mental retardation or learning disabilities, it will be necessary to simplify the program materials. While individualization of materials for each student will always be necessary, it is probably possible to create sets of modified materials (such as an audio-tape version) that will be generally useful.

Staff members can expect that progress will be slower for many handicapped students than for non-handicapped students, and that program plans and objectives will have to be divided into smaller units in order to show noticeable progress. Evaluation plans will also have to be stretched out in finer detail.

What activities might a handicapped student do in EBCE? As students enter the program they will engage in a series of group and individual sessions where they will begin to assess their interests and abilities, plan short term goals and begin to develop a learning program for the semester. They will also be learning about the EBCE program and how to use the forms and materials. These activities will grow out of, or be part of the development of an Individualized Education Program as is required for all Special Education students.

In contrast to other settings, however, in EBCE the student takes the major responsibility for planning his/her own program, with the learning coordinator providing the degree of support that is required.

Some students may need to take considerable time at this stage both in self-assessment activities and in learning, through carefully planned program activities, how to use EBCE learning techniques such as project planning. Use of introductory activities such as a "mini-project" may be particularly helpful with these students. Students will also at this stage benefit from orientation visits to community resources, given suitable support and assistance from EBCE staff.

The student, when ready, will begin to develop a project plan that will incorporate visiting resources in the community with other study at the school site. Through community contacts the student will be able to gain information on a topic of interest as well as to learn about one or more careers or jobs. The purpose is to provide the student with a learning experience that involves acquiring career information in the community, one-to-one interaction with an adult in the field, collecting information for a project, and assuming responsibility in planning and coordinating these activities. The activity will result in a completed project for which he/she will receive academic credit. Throughout this process the student's activities will be monitored by EBCE staff. Some handicapped students may need considerable assistance and support to move through these steps, but the individualized and flexible nature of the program should allow each student to move at his/her own pace.

Emphasis in the program is on student directed and student-paced learning based on goals set by the student. A handicapped student who has successfully completed the EBCE program should have a better self-understanding, more confidence and experience in moving around the community on his/her own, and in meeting and dealing with people and, finally, more awareness of career options and opportunities.

SELECTED BIBLIOGRAPHY

Bhaerman, R. D. Career and Vocational Development of Handicapped Learners: An Annotated Bibliography. Ohio State University, Columbus. ERIC Clearinghouse on Career Education Information Series No. 134, 1978.

Brolin, D. E. "Career education needs of Secondary educable students." Exceptional Children, Vol. 39, 1973.

Brolin, D. E., and Kolstoe, O. P. The Career and Vocational Development of Handicapped Learners. Ohio State University, Columbus. ERIC Clearinghouse on Career Education Information Series No. 135, 1978.

Brolin, D. E., and D'Alonzo, B. J. "Critical issues in Career Education for Handicapped Students." Exceptional Children, Vol. 45, No. 4, Jan., 1979.

Council for Exceptional Children. "Official Actions of the Delegate Assembly at the 56th Annual International Convention." Exceptional Children, September, 1978.

Coy, M. N. A Study of the Post-School Adjustment of Special Education Students with a View to Initiating Adult Education Programs. Final Report. (Special Education Research Program: Educational Improvement for the Handicapped). Merced County Schools (California State Department of Education, Sacramento, Division of Special Education), 1977.

Davis, S. A., and Weintraub, F. J. "Beyond Traditional Career Stereotyping." Journal of Career Education, Vol. 5, No. 1, September, 1978.

Far West Laboratory for Educational Research and Development, Experience-Based Career Education Project. Operational Handbooks. Vol. I: Management. Vol. II: Resources. Vol. III: Guidance and Instruction. Vol. IV: Project Planning Packages. San Francisco: FWL, 1976.

Godla, L. "Program Changes to Accommodate Handicapped Students." American Vocational Journal, Vol. 53, No. 3, March, 1978.

Halloran, W. "Handicapped Persons: Who Are They?" American Vocational Journal, Vol. 53, No. 1, January, 1978.

Hatlen, P. Personal Conversation, November, 1978.

Hirsch, S. P. Young, Gifted and Handicapped: Mainstreaming High Potential Handicapped Students Into the Executive High School Internships Program. Executive High School Internships of America, San Francisco, 1978.

Hoyt, K. Career Education for Special Populations. Monographs on Career Education. Office of Career Education (Department of Health, Education, and Welfare/Office of Education), Washington, D. C., 1976.

Hull, M. E. Vocational Education for the Handicapped: A Review. Ohio State University, Columbus. ERIC Clearinghouse on Career Education Information Series No. 119, 1977.

Ianacone, R. N., and Sigmond M. V. "Experience-Based Career Education: Innovative Application for the Handicapped." Career Education Quarterly, Vol. 2, No. 4, Fall, 1977.

Johnson, J. N. EBCE: The Far West Model, a Program Overview. (2nd ed.) San Francisco: Far West Laboratory for Educational Research and Development, 1975.

Lake, T. P., ed. Career Education: Exemplary Programs for the Handicapped. An edited version of an Abt Associates report. Reston, VA: The Council for Exceptional Children , 1974.

Lee, A. Learning a Living Across the Nation, Vol. 4, Project Baseline, Flagstaff, AZ: Northern Arizona University, October, 1975.

National Institute of Education. A Comparison of Four Experience-Based Career Education Programs. Washington, D.C.: NIE, 1976.

Olympus Research Corporation, An Assessment of Vocational Education Programs for the Handicapped under Part B of the 1968 Amendments to the Vocational Education Act. Salt Lake City, 1974.

Parents' Campaign for Handicapped Children and Youth. "Vocational Education - An End to Dependency." Common Sense from Closer Look, Summer, 1978.

Phelps, L. A., and Lutz, R. J. Career Exploration and Preparation for the Special Needs Learner. Boston: Allyn and Bacon, 1977.

Reynolds, M. C. "Career Education and Mainstreaming." Journal of Career Education, Vol. 5, No. 1, September, 1978.

Reynolds, M. C., and Birch, J. W. Teaching Exceptional Children in All America's Schools. Reston VA: The Council for Exceptional Chidren, 1977.

Spotts, R. L., ed. National Directory of Experience-Based Career Education Programs. Prepared for the National Institute of Education. U. S. Department of Health, Education and Welfare. San Francisco: Far West Laboratory for Educational Research and Development, 1977.

Spotts, R. L., and Evenson, J. S. Evaluation of Outcomes at Three Pilot Programs, 1976-77. San Francisco: Experience-Based Career Education Project, Far West Laboratory for Educational Research and Development, 1977.

Spotts, R. L., and Evenson, J. S. Evaluation of the Greenhouse Program, 1977-78. San Francisco: Experience-Based Career Education Project, Far West Laboratory for Educational Research and Development, 1978.

Stodden, R. "Total Life Preparation of the Special Needs Student--Career Education as a Viable Alternative. "Career Education Quarterly, Vol. 2, No. 4, Fall, 1977.

Weisgerber, R. Mainstreaming the Handicapped in Vocational Education: Developing a General Understanding. Palo Alto, CA: American Institute for Research in the Behavioral Sciences, 1977.